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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dethe Elza

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EXAMINER

FABER, DAVID

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,046	Applicant(s) ELZA ET AL.	
	Examiner DAVID FABER	Art Unit 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,12-16,18-24 and 27-35 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 and 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 16, 18-24, 31-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on 10 November 2008.
2. Claims 16, 21-23 have been amended.
3. Claims 31-35 have been added.
4. The rejection of Claim 16 under 35 USC 101 has been withdrawn as necessitated by the amendment.
5. Claims 1, 3-9, 12-16, 18-24, 27-35 pending, with claims 1, 16, and 31 being the independent claims. Claims 12-15, 27-30 have been withdrawn from consideration (see below). Claims 1, 3-9, 16, 18-24, and 31-35 have been examined below.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 3-9, 16, 18-24, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iverson, Lee, "NODAL: A File system for Ubiquitous Collaboration," White Paper, SRI International, September 20, 2001, last downloaded by the Examiner on January 13, 2006 from <http://nodal.sourceforge.net/NODAL-WhitePaper.html>, downloaded pages 1-32 [hereinafter "NODAL"], in view of Iverson, Lee, "[un re-II] Meeting Summary: 4 May 2000," Message id: 3912508E.2CF1B4C@eng.sun.com from Erick Armstrong, May 4, 2000, last downloaded by the Examiner on January 14, 2006, from:**

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<http://hot.burningchrome.com/archives/unrev-ii/msg01068.html>, downloaded pages 1-3

[hereinafter “Iverson”].

Regarding **independent claim 1**, NODAL in view of Iverson teaches:

A method in a distributed document object model system for associating business logic, comprising:

(It is noted that a “business logic” is defined in the application as including an asynchronous mode wherein a client-side business logic component may not need to wait for the DDOM client to receive a response to a mutation request before the mutation routine returns. Specifically, see Iverson, page 27, third paragraph, stating: “Another advantage is that the server may send any update to the client at any time, thus fulfilling the need to notify the client when other users have modified content.” (Emphasis in the original). The Iverson example, of notification to clients of a change in a database, is nearly identical to the embodiment described in the disclosure, as follows: “As an example, the business logic component may monitor a financial database and cause mutations to occur to a document based on changes in the database.”

The distributed document object model DDOM, is taught in Iverson, first through third paragraphs.)

receiving a registration request from a business logic event handler for an event of the distributed document object model;

(See, NODAL, pages 26-27, teaching the asynchronous update routine. See also, NODAL, pages 20-21, teaching the “Cursor” interface that handles the data mutation interfaces as the business event logic handler.)

registering the business logic event handler; and

(See, NODAL, pages 20-21, teaching that the “Cursor” is part of the software and is inherently

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registered to be in communication between the client and the server.)

when an event occurs, notifying the business logic event handler;

(See, NODAL, page 20, teaching the permissions for mutations are notified to the “Cursor” object.)

receiving an indication from the business logic event handler; and

(See, NODAL, pages 18-20, teaching messages from the “Cursor” object regarding requested mutations.)

performing a function relating to the received indication.

(See, NODAL, pages 18-20, teaching the editing functions.)

(NODAL teaches the business logic handler and its registration and function as claimed, but it does not expressly teach the distributed document object model (DDOM).

Iverson expressly teaches the DDOM.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Iverson and NODAL. Both NODAL and Iverson are in the same field of endeavor, multi-user hierarchical document editing and manipulation.

The suggestion or motivation to combine the references is that they are created by the same person, Iverson reporting the developmental creation of Lee Iverson, and NODAL being authored by Lee Iverson. In addition, see, NODAL, page 11, teaching that NODAL was designed to work with a wide variety of distributed networks.)

NODAL teaches application of a business rule to cause modifications (i.e. second modifications, etc.) to a document, and the system causing the event to occur when a first modification is made (See, NODAL, at least page 20, teaching that the “Cursor” object enforces business rules related to permissions to make mutations.). See also NODAL, page 20, teaching that a program accessing the NODAL repository for any purpose other than browsing will deal

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primarily with the “Cursor” interfaces. See also, NODAL, page 27, teaching messaging from the server, “Cursor” object, regarding mutations.

Regarding **dependent claim 3**, NODAL in view of Iverson teaches:

The method of claim 2 wherein the event handler is registered for a document type.

(See, NODAL, page 29, teaching the system, and inherently the “Cursor” object, enabled for an “image” type document.)

Regarding **dependent claim 4**, NODAL in view of Iverson teaches:

The method of claim 2 wherein the handler disallows the requested mutation.

(See, NODAL, pages 18-19, teaching disallowing editing requests.)

Regarding **dependent claim 5**, NODAL in view of Iverson teaches:

The method of claim 2 wherein the handler allows the requested mutation.

(See, NODAL, pages 18-19, teaching allowing editing requests.)

Regarding **dependent claim 6**, NODAL in view of Iverson teaches:

The method of claim 2 wherein event handling is performed on a client computing device.

(See, NODAL, pages 9-10, teaching that the NODAL system may be either client-side or server-side.)

Regarding **dependent claim 7**, NODAL in view of Iverson teaches:

The method of claim 2 wherein event handling is performed on a server computing device.

(See, NODAL, pages 9-10, teaching that the NODAL system may be either client-side or server-side.)

Regarding **dependent claim 8**, NODAL in view of Iverson teaches:

The method of claim 1 wherein the event handler handles an event that is generated when a requested mutation is applied to a document.

(See, NODAL, page 20, teaching that the "Cursor" object processes the entire content of the reference, including the mutation.)

Regarding **dependent claim 9**, NODAL in view of Iverson teaches:

The method of claim 1 wherein the event handler handles an event that is generated after a requested mutation is applied to a document.

(See, NODAL, page 20, teaching that the "Cursor" object maintains an audit trail after mutations are made.)

Regarding **claims 16, 18-24**, claims 16, 18-24 incorporate substantially similar subject matter as claimed in claims 1, 3-9, respectively, and are rejected along the same rationale.

Regarding **independent claim 31**, Claim 31 incorporates substantially similar subject matter as in claim 1, and is rejected along the same rationale. Furthermore, NODAL and Iverson fail to disclose the functionality of a first event occurring again in view of a second event caused by the first action. However, it was well-known in the art at the time of Applicant's invention that the

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user can perform the same modification again of the first mutation causing the functionality of a first event to occur again for the second event. The suggestion or motivation to combine the references is it enables a user to fix a mistake the second time by correcting the mistake after making the mistake originally during the first time.

Regarding **claims 32-35**, claims 32-35 incorporate substantially similar subject matter as claims in claims 1, 16, and 31 are rejected along the same rationale. Furthermore, NODAL discloses the editing of nodes. (Pages 18-20)

Response to Arguments

8. Applicants' arguments filed 10 November 2008 have been fully and carefully considered, but they are not persuasive.

9. Regarding rejections of claims 1 and 16:

Applicants assert that that NODAL does not teach Applicant's claimed asynchronous invocation mode of a business logic event handler wherein Applicant argues that the Office Action misinterprets a feature of the business logic event handler as its definition stating "Simply because a business logic event handler has an asynchronous mode does not mean that it is equivalent to any other object that also has an asynchronous mode." In addition, Applicants assert that that NODAL does not teach registering a business logic event handler for an event as currently claimed. However, the Examiner respectfully disagrees.

The claim language itself fails to disclose what a business logic handler is. In addition, the arguments presented by the Applicant fail to disclose what a business logic event handler is. Therefore, from the specification defining a "business logic", it is noted that a "business logic" is

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defined in the application as including an asynchronous mode wherein a client-side business logic component may not need to wait for the DDOM client to receive a response to a mutation request before the mutation routine returns.(i.e. Paragraph 0126). Thus, specifically, see Iverson, page 27, third paragraph, stating: "Another advantage is that the server may send *any* update to the client at any time, thus fulfilling the need to notify the client when other users have modified content." (Emphasis in the original). The Iverson example, of notification to clients of a change in a database, is nearly identical to the embodiment described in the disclosure, as follows: "As an example, the business logic component may monitor a financial database and cause mutations to occur to a document based on changes in the database.". NODAL, pages 26-27, teaches the asynchronous update routine. NODAL, pages 20-21, teaches the "Cursor" interface that handles the data mutation interfaces as the business event logic handler. NODAL, page 27, teaches a business logic event handler such that mutations to the file may be automatically messages to a client, or may be delayed for processing. NODAL, pages 20-21, teaches that the "Cursor" is part of the software and is inherently registered to be in communication between the client and the server. NODAL teaches the business logic handler and its registration and function as claimed, (...*"registering the business logic event handler"*) but it does not expressly teach the distributed document object model (DDOM).Iverson expressly teaches the DDOM. The distributed document object model DDOM, is taught in Iverson, first through third paragraphs.

Applicant asserts that the cited art of record does not monitoring for an occurrence of the event ("if the event occurs"), as currently claimed. The examiner respectively disagrees. It is the examiner's opinion that NODAL on page 20 teaches the permissions for mutations are notified to the "Cursor" object, and on pages 18-20 teaches messages from the "Cursor" object regarding requested mutations.

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Applicant asserts that the cited art of record does not teach business rules, as currently claimed. The examiner respectfully disagrees. It is the examiner's opinion that NODAL teaches this on page 20 of NODAL.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/David Faber/
Examiner, Art Unit 2178

/William L. Bashore/
Supervisory Patent Examiner, Art Unit 2175